FIG. 1

mryrasalgs	**dgvrvtm*esa**	ltardrvgvq	dfvllenfts
eaafienlrr	rfrenliyty	igpvlvsvnp	yrdlqiysrq
5 hmeryrgvsf	yevpphlfav	adtvyralrt	errdqavmis
[gesgagkt]ea	tkrllqfyae	tcpapergga	vrdrllqsnp
vleafgnakt	lrndnssrfg	kymdvqfdfk	gapvgghils
ylleksrvvh	qnhgernfhv	fyqlleggee	etlrrlgler
npqsylylvk	gqcakvssin	dksdwkvmrk	alsvidfted
10 evedllsiva	svlhlgnihf	aadedsnaqv	ttenqlkylt
rllgvegttl	realthrkii	akgeellspl	nleqaayard
alakavysrt	ftwlvrkinr	slaskdaesp	swrsttvlgl
ldiygfevfq	hnsfeqfcin	ycneklqqlf	ieltlkseqe
eyeaegiawe	pvqyfnnkii	cdlveekfkg	iisildeecl
15 rpgeatdltf	lekledtvkp	hphflthkla	dqktrksldr
gefrllhyag	evtysvtgfl	dknndllfrn	lketmcssmn
pimaqcfdks	elsdkk rpet	vatqfkmsll	qlveilrske
payircikpn	dakqpgrfde	vlirhqvkyl	glmenlrvrr
agfayrrkye	aflqrykslc	petwpmwagr	pqdgvavlvr
20 hlgykpeeyk	mgrtkifirf	pktlfateds	levrrqslat
kiqaawrgfh	wrqkflrvkr	saiciqswwr	gtlgrrkaakr
kwaaqtirr	lirgfilrhs	pr cpenaffl	dhvrasflln
lrrqlprnvl	dtswptpppa	lreasellrel	cmknmvwky
crsispewkq	qlqqkavase	ifkgkkdnyp	qsvprlfist
25 rlgteeispr	vlqslgsepi	qyavpvvkyd	rkgykprprq
llltpsavvi	vedakvkqri	dyanltgisv	sslsdslfvl.
hvqrednkqk	gdvvlqsdhv	ietltktals	adrvnninin
qgsitfaggp	grdgiidfts	gsellitkak	nghlavvapr
lnsr.			

30

FIG. 2

```
  1   ggagcg...c gccgggtccg gcaggatgcg ctaccgggca tcg...gg
      gcagtgacgg

 61   ggttcgagtg accatggaga gcgccttgac tgcccgagac cgggtagggg
      tgcaggactt

121   tgtcctgctg gagaatttca ccagtgaggc tgccttcatt gagaacctcc
      ggcggcggtt

181   ccgggagaac ctcatttata cctacatcgg tcctgtccta gtctctgtca
      atccctaccg

241   agacctacag atctacagcc ggcagcatat ggaacgctac cgtggtgtca gtttctatga

301   agtaccacct catttgtttg cagtggctga cactgtatac cgggcacttc gtactgagcg

361   tcgggaccag gcagtgatga tttctggaga gagtggggca ggcaagacag aggccaccaa

421   gagactgctc cagttctatg cagagacctg cccagcccct gaacggggtg gcgcagtgcg

481   agaccgcctg ttgcagagca accccgtgtt agaggccttt gggaatgcca agactctccg

541   caacgataac tccagccggt ttggaaagta catggatgtg cagtttgact tcaagggtgc

601   ccccgtggga ggccacattc tcagttacct cctggaaaag tcccgggtgg tgcaccaaaa

661   tcacggagag cggaacttcc acgtctttta ccagctactg gaggggggcg aggaggagac

721   tctccgtcgg ctgggcttgg aacggaaccc ccagagctac ttgtacctgg tgaagggcca

781   gtgtgccaag gtctcctcca tcaacgacaa gagtgactgg aaggttatga ggaaggcgct

841   gtccgtcatt gacttcactg aggatgaagt ggaggacttg ctcagcatcg tggccagcgt

901   cctacatctg ggcaacatcc actttgctgc tgacgaggac agcaatgccc aggttactac

961   tgagaaccag ctcaaatatc tgaccaggct ccttggtgtg gaaggtacaa cacttaggga

1021  agccctgacc cacaggaaga tcatcgccaa gggggaagag ctcctgagcc cactgaacct

1081  tgaacaggcg gcatatgcaa gggatgcgct tgccaaggct gtgtacagcc ggacattcac

1141  ctggctggtc agaaagatca ataggtcact ggcctctaag gacgctgaga gccccagctg

1201  gcgaagcacc acggttcttg ggctcctgga catttacggc tttgaagtgt ttcagcataa

1261  cagcttcgag cagttctgca tcaactactg caatgagaag ctgcagcagc tcttcatcga

1321  gctgactctc aagtcggagc aggaggaata cgaggctgag ggcatcgcgt gggaacctgt

1381  ccagtacttc aacaacaaga tcatctgtga cctggtagag gagaagttca agggcatcat

1441  ctccatcttg gatgaagagt gcctgcgtcc tggggaggcc acggacctga cctttctgga

1501  gaagttggag gacactgtca gccccaccc tcacttcctg acgcacaagc tcgctgacca

1561  gaagaccagg aaatccctag accgagggga gttccgcctt ctgcattatg ctggagaggt

1621  gacctacagt gtgactgggt ttctggataa aaacaatgac ctcctcttcc ggaacctgaa

1681  ggagaccatg tgcagctcaa tgaaccccat catggcccag tgctttgaca agagtgagct

1741  cagtgacaag aagcggccag agacggtggc cacccagttc aagatgagcc tcctgcagct

1801  cgtggagatc ctgaggtcta aggagcctgc ctatatccgg tgcatcaagc caaacgacgc
```
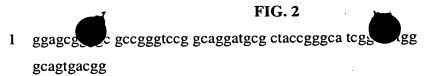

1861 caagcagcc; ggtcgctttg atgaggtgct catccgacat caggtgaagt acctgggact

1921 gatggag ctgcgcgtgc gcagagctgg ctttgcctat cgtcgca tgaggcttt

1981 cctgcagagg tacaagtcac tgtgcccaga gacatggccc atgtgggcag gacggcccca

2041 ggatggtgtg gccgtgttgg tcagacacct cggctacaag ccagaagagt acaaaatggg

5   2101 caggactaag atcttcatcc gattccccaa gaccttattt gccacagagg actccctgga

2161 agtccggcgg cagagtctag ccaccaagat ccaggcggcc tggaggggct ttcattggcg

2221 acagaaattt ctccgggtga agcgatcagc catctgtatc cagtcatggt ggcgtggcac

2281 actgggccgg aggaaggcag ccaagaggaa gtgggcagcc cagaccatcc gtcgactcat

2341 ccgtggcttc attttgcgcc attcaccccg gtgccctgag aatgccttct tcttggacca

10 2401 cgtgcgcgcc tcatttttgc ttaacctgag gcggcaactg ccccggaatg ttctggacac

2461 ctcctggccc acaccccac ctgccctgag agaggcctca gaactgctac gggaactgtg

2521 catgaagaac atggtgtgga agtactgccg gagcatcagc cctgagtgga agcagcagct

2581 gcagcaaaag gcggtggcta gtgaaatttt caagggcaag aaggacaact accccagag

2641 tgtccccaga ctcttcatta gcacacggct tggcacagag gagatcagcc ccagagtgct

15 2701 tcaatccttg ggctctgaac ccatccagta tgccgtgccc gtggtaaaat

       acgaccgtaa

2761 gggttacaag cctcgccccc ggcagctgct gctcacgccc agtgctgtgg tcattgtgga

2821 ggatgctaaa gtcaagcaga gaattgatta tgccaaccta accggaatct ctgtcagtag

2881 cctgagtgat agcctatttg tgcttcacgt gcagcgtgaa gacaacaagc agaagggaga

20 2941 tgtggtgctg cagagtgatc atgtgatcga gacactaacc aagacggccc tcagtgctga

3001 ccgcgtgaac aatatcaaca tcaaccaggg cagcataacg tttgcagggg gtccaggcag

3061 ggacggcatc attgacttca catcgggctc agagcttctc atcaccaagg ctaagaatgg

3121 ccacctggct gtggtggccc cacggctgaa ttctcggtga tgaaggctgc ggtggaccgc

3181 tcctgactcc tgatgcttcc cttagtcccc tcctcccctc cgacttacca aaaactcaag

25 3241 cttccaaaca gggatccatg gacaccctca aaacccacgc tgcaaactcc tgccttctgc

3301 tcgccccctc ttgaggtgat caggagccag ggagctaccc catgagtggg ccaggccggg

3361 ccacaccaat agaaaagcag aggcctgagc aggccaggcc agccctctgc tgatgccaaa

3421 tatctaagac aagggaattt taactgaggt tttctctgag attttttgat gctttatagg

3481 aaactatttt tttaagaaag ccattttcct accctaaaca cactggatgt gtttttccct

30 3541 gcctcgaaca gggcaaggaa tgtaactgaa agactgactg ggctgggctg gaaggtcctc

3601 ttcttggcca acccttcctt attcccttgt ctgcctgtcc atccacctgc acctttagc

3661 cca

FIGURE 3

A

Start site for NMIβ
↓

    M   R   Y   R   A   S   A   L   G   S

AGCGGGGCGCCGGGTCCGGCAGG ATG CGC TAC CGG GCA TCG GCC CTG GGC AGT

Consensus MI start site
↓

D   G   V   R   V   T   *M*   *E*   *S*   *A*   *L*   *T*   *A*   *R*

GAC GGG GTT CGA GTG ACC *ATG* *GAG* *AGC* *GCC* *TTG* *ACT* *GCC* *CGA* *GAC* *CGG* *GTA*

B

Vibrator mouse (9) and human (10) myosin I β

Normal mouse (10) myosin I β

Nuclear myosin I β

FIGURE 4